



**Northeastern Association
of
Forensic Scientists**

NEAFS Plenary Session
Hershey, PA
November 5, 2014

**National Commission on Forensic
Science (NCFS) and
Organization of Scientific
Area Committees (OSAC)**

John M. Butler, Ph.D.

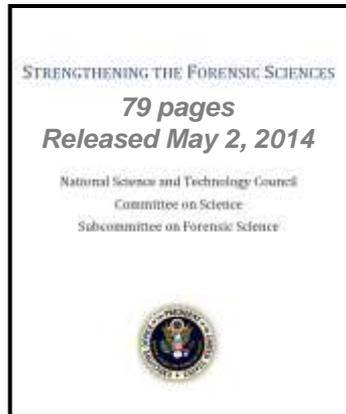
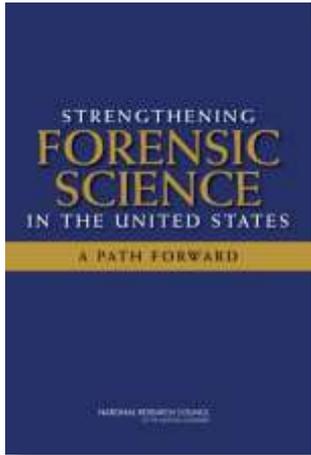
National Institute of Standards and Technology

NIST Fellow & Special Assistant to the Director for Forensic Science

Vice-Chair, National Commission on Forensic Science



NCFS and OSAC: U.S. Efforts to Strengthen Forensic Science



http://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/strengthening_the_forensic_sciences_may_-_2014.pdf

- National Academy of Sciences (**NAS**) **report** issued in Feb 2009
- White House **Subcommittee on Forensic Science** (SoFS) operated from July 2009 to Dec 2012

DOJ/NIST Partnership (announced Feb 2013)

1. **NCFS** (National Commission on Forensic Science)
 - First meeting held February 3-4, 2014 in Washington DC
2. **OSAC** (Organization of Scientific Area Committees)
 - **Membership named**; first public meetings to be held Feb 2015

National Commission on Forensic Science

A Federal Advisory Committee
for the U.S. Department of Justice



<http://www.justice.gov/ncfs>

February 3-4, 2014 was the first meeting of the **National Commission on Forensic Science**



37 Commissioners + DOJ/NIST Leadership Team
(with ~100 public attendees)

Webcast of Second NCFS Meeting

<http://www.nist.gov/forensics/national-commission-on-forensic-science-webcast.cfm>

National Commission on Forensic Science Meeting Part 1



So I'd like to welcome those who are viewing us via the Webcast.

02:55 / 02:00

English

The image shows a wide-angle view of a large conference room. A long, dark wood conference table is set up with a dark red cloth. Numerous people are seated around the table, facing each other. In the center of the table, a man in a dark suit is circled in red. Behind the table, a blue backdrop features the logo of the National Commission on Forensic Science. To the left and right of the backdrop are the American flag and the NIST flag. The room is well-lit, and there are large windows with curtains in the background. The video player interface at the bottom shows a progress bar at 02:55 / 02:00, a language dropdown set to English, and various control icons.

National Commission on Forensic Science (NCFS)

www.justice.gov/ncfs

NCFS Leadership



James M. Cole
Deputy Attorney General
DOJ Co-Chair



Willie E. May
Acting Director of NIST
NIST Co-Chair



Nelson A. Santos
Vice-Chair (DOJ)



John M. Butler
Vice-Chair (NIST)

In 2013, the Department of Justice (DOJ) established the National Commission on Forensic Science, in partnership with the National Institute of Standards and Technology (NIST), to enhance the practice and improve the reliability of forensic science. This unique partnership draws upon each agency's core strengths to promote scientific validity, reduce fragmentation, and improve federal coordination of forensic science.

The Commission is co-chaired by Deputy Attorney General James M. Cole and NIST Acting Director and Acting Under Secretary of Commerce for Standards and Technology, Willie E. May. Nelson Santos, Deputy Assistant Administrator for the Office of Forensic Sciences at the Drug Enforcement Administration, and John M. Butler, Special Assistant to the NIST Director for forensic science, serve as vice-chairs. Brette Steele, Senior Advisor on Forensic Science and Senior Counsel to the Deputy Attorney General serves as the Designated Federal Officer and Robin Jones, Consultant within the Department of Justice, serves as Program Manager.

The Commission includes federal, state and local forensic science service providers; research scientists and academics; law enforcement officials; prosecutors, defense attorneys and judges; and other stakeholders from across the country.

GOVERNING DOCUMENTS

[Charter](#)

[Bylaws](#)

GENERAL INFORMATION NATIONAL COMMISSION ON FORENSIC SCIENCE

CONTACT

Brette Steele
Brette.L.Steele@usdoj.gov

By Phone:
(202) 305-0180

STAY CONNECTED

 Sign up for E-Mail Updates

 Subscribe to News Feeds

Next meeting (5th): January 29-30, 2015

Members of the National Commission on Forensic Science (NCFS)

<http://www.justice.gov/ncfs/members>

Voting Members

Leadership

James Cole (DOJ Co-Chair)	Deputy Attorney General - U.S. Department of Justice (DOJ)
Willie May (NIST Co-Chair)	Acting Director - National Institute of Standards and Technology (NIST)

1	Nelson Santos (DOJ Vice-Chair)	Deputy Assistant Administrator - Drug Enforcement Administration (DEA) Laboratory
2	John Butler (NIST Vice-Chair)	Special Assistant to the Director for Forensic Science - NIST
	Brette Steele (DFO)	Senior Advisor on Forensic Science and Senior Counsel within the Office of the DAG
	Robin Jones (Program Manager)	Contractor to U.S. Department of Justice

Department of Justice

3	Greg Czarnopys	Deputy Assistant Director - Alcohol, Tobacco, Firearms and Explosives (ATF) Lab
4	John Kacavas	Prosecuting Attorney (U.S. Attorney - District of New Hampshire)
	Gerry LaPorte*	Director - Office of Investigative and Forensic Sciences, National Institute of Justice (NIJ)
5	Marc LeBeau	Senior Forensic Scientist - Federal Bureau of Investigation (FBI) Laboratory
	Kathryn Turman*	Assistant Director - FBI's Office of Victim Assistance



James M. Cole
Deputy Attorney General
DOJ Co-Chair



Willie E. May
Acting Director of NIST
NIST Co-Chair



Nelson A. Santos
Vice-Chair (DOJ)



John M. Butler
Vice-Chair (NIST)



Brette L. Steele
Designated Federal
Official (DFO)



Robin W. Jones
Program Manager

Commission Staff

Members of the National Commission on Forensic Science (NCFS)

<http://www.justice.gov/ncfs/members>

Practitioners

6	Cecelia Crouse	Laboratory Director - Palm Beach County (Florida) Sheriff's Office Crime Laboratory
7	Dean Gialamas	Assistant Division Director - Los Angeles County (California) Sheriff's Department
8	Linda Jackson	Laboratory Director - Virginia Department of Forensic Science
	Patricia Manzolillo*	Laboratory Director - United States Postal Inspection Service
9	Michael (Jeff) Salyards	Executive Director - Defense Forensic Science Center, Department of Defense (DoD)
10	Ryant Washington	Sheriff - Fluvanna County (Virginia) Sheriff's Office
11	Phil Pulaski	Former Chief of Detectives (retired) - New York City Police Department

Medical Examiner/Coroner

12	Vincent Di Maio	Medical Examiner (retired) - Bexar County (San Antonio), Texas
13	John Fudenberg	Assistant Coroner - Clark County (Las Vegas, Nevada) Office of the Coroner/Medical Examiner

Legal Community and Officers of the Court

14	Ted Hunt	Prosecuting Attorney (Kansas City, Missouri)
15	Matt Redle	Prosecuting Attorney (Sheridan County, Wyoming)
16	Pam King	Defense Attorney (State of Minnesota Public Defender)
17	Julia Leighton	Defense Attorney (Washington DC Public Defender Service)
18	Judge Barbara Hervey	Judge (Texas State Court of Criminal Appeals)
19	Judge Bridget Mary McCormack	Judge (Michigan State Supreme Court)
	Judge Jed Rakoff*	Judge (Senior U.S. District Judge for the Southern District of New York)

Members of the National Commission on Forensic Science (NCFS)

<http://www.justice.gov/ncfs/members>

Academic and/or Researchers

20	Suzanne Bell	Professor of Chemistry (West Virginia University)
21	Frederick Bieber	Professor of Pathology (Harvard Medical School)
22	Thomas Cech	Professor of Biochemistry (University of Colorado-Boulder)
23	M. Bonner Denton	Professor of Chemistry and Geosciences (University of Arizona)
24	Andrea Ferreira-Gonzalez	Professor of Pathology (Virginia Commonwealth University)
25	Stephen Fienberg	Professor of Statistics and Social Science (Carnegie Mellon University)
26	S. James (Jim) Gates, Jr.	Professor of Physics (University of Maryland)
27	Troy Duster	Professor of Sociology (University of California-Berkeley)
28	Jules Epstein	Professor of Law (Widener University School of Law)
29	Paul Giannelli	Professor of Law (Case Western Reserve School of Law)

	Marilyn Huestis*	Chief of Chemistry and Drug Metabolism - National Institute of Drug Abuse, NIH
	Mark Weiss*	Director of the Behavioral and Cognitive Sciences Division - National Science Foundation

Additional Stakeholders

30	David Honey*	Assistant Deputy Director - National Intelligence for Science and Technology
	Susan Howley	Director of Public Policy - National Center for Victims of Crime (Advocate for Victim's Rights)
31	Peter Neufeld	Defense Attorney and Co-Founder of the Innocence Project (Advocate for Defendant's Rights)
	Frances Schrotter*	Senior Vice President and Chief Operating Officer - American National Standards Institute (ANSI)

31 voting members and 8 ex-officio members

NCFS Co-Chairs and OSTP Director address the first Commission meeting

NIST Director
Pat Gallagher

Deputy Attorney General
James Cole

OSTP Director
John Holdren





Informational Briefings

- **Judge Harry Edwards** spoke on findings from the 2009 NAS report
- Bureau of Justice Statistics researcher **Matt DuRose** reviewed the 2009 census of U.S. forensic laboratories



White House **Subcommittee on Forensic Science** committee chairs discuss outcome of work conducted from 2009 to 2012

Patricia Manzolillo

U.S. Postal Service
Forensic Laboratory



**Accreditation
& Certification**

Dean Gialamas

LA County Sheriff's
Office Crime Lab



**Proficiency
Testing**

Jeff Salyards

Defense Forensic
Science Center



**Research &
Development**

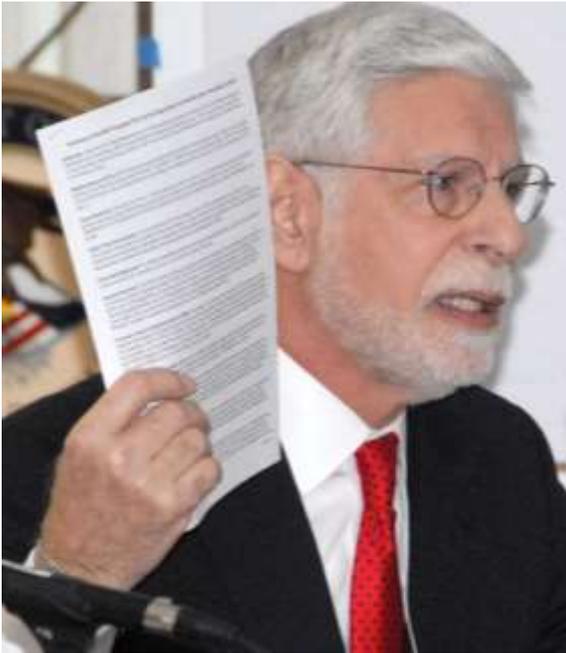
Gerry LaPorte

National Institute
of Justice



**Documentary
Standards**

Mark Stolorow (NIST) introduces the Organization of Scientific Area Committees (OSAC) plan



For more information, see <http://www.nist.gov/forensics/osac.cfm>

Commission discussions were led by Vice-Chairs John Butler (NIST) and Nelson Santos (DOJ)



Discussed issues and developed subcommittee topics

Current NCFS Subcommittees

where much of the Commission work will occur...

1. Accreditation and Proficiency Testing
2. Interim Solutions
3. Medico-legal Death Investigation
4. Reporting and Testimony
- 5. Scientific Inquiry and Research**
6. Training on Science and Law
7. Human Factors and Cognitive Bias

**Each NCFS
subcommittee
includes individuals
beyond the
Commissioners**

Issues being examined:
(a) Foundational literature
(b) Educational programs
(c) Transition of research
(d) Measuring impact

Subcommittee products will be discussed and voted on by the full Commission prior to be recommended to the Attorney General

NCFS Meeting 2 Topics

May 12-13, 2014

- **Panel on Cognitive Bias and Human Factors**
 - Speakers: Deborah Boehm-Davis, John Collins, Michael Risinger, David H. Kaye
- **Panel on Ethics in Forensic Science**
 - Speakers: Jamie Upshaw Downs, Rob Lesnevich
- **Subcommittee Reports**
- **OSAC Update**
 - Speakers: Mark Stolorow, Willie May

NCFS Meeting Materials Available

<http://www.justice.gov/ncfs/meeting-materials.html>

Meeting Summary

23 page pdf document

National Commission on
Forensic Science

Meeting Summary

May 12-13, 2014

Office of Justice Programs
810 7th Street NW, Washington, DC

Speaker Slides (pdf files)

2nd National Commission on Forensic Science Webcast

National Commission on Forensic Science Meeting...



Webcast
(>9 hours of
archived video)

MEETING TWO

References

Listing of 22 references provided to Commissioners

Human Factors and Cognitive Bias in Forensic Science

Deborah Boehm-Davis, Dean, College of Humanities and Social Sciences and University Professor, Department of Psychology, George Mason University

John Collins, President, Forensic Foundations Group

The Need for Sequential Unmasking

Michael Risinger, John J. Gibbons Professor of Law, Seton Hall University School of Law

David H. Kaye

Distinguished Professor of Law and Weiss Family Faculty Scholar, Penn State University, Dickinson School of Law



Commission Work Products

- The Commission is a Department of Justice Federal Advisory Committee and therefore **only has direct authority to make recommendations to the Attorney General** (who can direct efforts in three DOJ laboratories: FBI, DEA, and ATF)
- Work Product Types: (1) Views, (2) Directives, or (3) Policies

Voting is conducted electronically with a **two-thirds majority required to pass**



NCFS Meeting 3 Topics

August 26-27, 2014

- Amended Bylaws Reviewed
 - **Vote passed on a directive to survey police forensic units**
- **Panel on Cognitive Bias and Human Factors**
 - Speakers: Itiel Dror, Bill Thompson
 - **New subcommittee on Human Factors was formed**
- **Panel on Latent Print Automated Fingerprint Identification System (AFIS) Interoperability**
 - Speakers: Melissa Gische, Austin Hicklin, Lauren Reed, David Russell
- **UK Regulator Andrew Rennison** to share lessons learned from the United Kingdom
- **Panel on Role of Accreditation in Forensic Science**
 - Speakers: Beth Mishalanie, Ross Randlett, Roger Klein
- **Subcommittee Reports**

NCFS Meeting 4 Topics

October 28-29, 2014

- **Subcommittee Reports & Work Product Discussion**
 - **Six work products** (see next slide)
- OSAC and NIST Center of Excellence update
 - Speaker: Mark Stolorow
- Bureau of Justice Statistics Law Enforcement Agency Forensic Unit Survey Proposal (follow-up to previous meeting's directive)
 - Speakers: Erica Smith, Matthew DuRose
- Reviews of recently released reports
 - **Achieving Interoperability for Latent Fingerprint Identification in the United States (OSTP)**
 - Speakers: Tania Simoncelli, Laura Gerhardt
 - **Identifying the Culprit: Assessing Eyewitness Identification (NRC)**
 - Speakers: Thomas Albright, Judge Jed Rakoff

Commission Draft Work Products

<http://www.justice.gov/ncfs/work-products>

1. Universal Accreditation (policy)
2. Scientific Literature (views)
3. Pretrial Discovery (policies & directives)
4. Expert Testimony (policies & directives)
5. MDI accreditation & certification (policy)
6. Terminology (views)

Public comments are reviewed and input from Commissioners sought during NCFS meeting deliberations

Comments Received on Initial NCFS Subcommittee Work Products

Posted October 14, 2014 and closed October 27, 2014 11:59PM

Subcommittees decided on format, length, etc.

Document	Length	# Comments Received
Universal Accreditation (policy)	4 pages	21
Scientific Literature (views)	4 pages	9
Pretrial Discovery (policies & directives)	28 pages	37
Expert Testimony (policies & directives)	27 pages	40
MDI accreditation & certification (policy)	7 pages	16
Terminology (views)	2 pages	15
		138 comments

Public comments provided to www.Regulations.gov (docket # DOJ-LA-2014-0006)

Future NCFS Meeting Dates

<http://www.justice.gov/ncfs>

Meeting 5: January 29-30, 2015
Meeting 6: April 30-May 1, 2015

Additional meeting dates should be set before the end of 2014

Federal Advisory Committees exist on a 2-year renewal cycle

The existing Commission ***charter expires April 23, 2015***
DOJ plans to renew charter (and include digital evidence)

Organization of Scientific Area Committees (OSAC)

Forensic discipline-specific guidance groups administered by NIST



<http://www.nist.gov/forensics/osac/index.cfm>

OSAC Launch

- February 4, 2014 announcement to NCFS
- The OSAC will be a **collaborative body of more than 500 forensic science practitioners and other experts** who represent all levels of the government, academia and industry.
- Establishing OSAC to strengthen the nation's use of forensic science by:
 - supporting the development and promulgation of forensic science **consensus documentary standards** and guidelines
 - determining each forensic discipline's **research and measurement standards needs**
 - ensuring that a **sufficient scientific basis** exists for each discipline

Organization of Scientific Area Committees (OSAC)

June 26

Forensic Science Standards Board (FSSB)

July 16

Legal Resource Committee (LRC)

Quality Infrastructure Committee (QIC)

Human Factors Committee (HFC)

Sept 3

When DE subcommittee is appointed, there will be 543 individuals in OSAC

SAC
Biology/DNA

SAC
Chemistry/
Instrumental Analysis

SAC
Crime Scene/
Death Investigation

SAC
Digital/Multimedia

SAC
Physics/Pattern

Bottom portion (subcommittees - DE) announced October 29, 2014

DNA Analysis Sub1

Controlled Substances Sub

Anthropology Sub

Facial Identification Sub

Blood Stain Pattern
Analysis Sub

DNA Analysis Sub2

Fire Debris and Explosives
Sub (lab)

Disaster Victim
Identification Sub

Imaging Technologies Sub

Friction Ridge Sub

Wildlife Forensics Sub

Geological Materials Sub

Dogs and Sensors Sub

Speaker Recognition Sub

Firearms & Toolmarks
Sub

Gunshot Residue Sub

Fire Scene and
Explosives Sub

Digital Evidence Sub

Footwear
& Tire Tread Sub

Materials (Trace) Sub

Medical/Legal Death
Investigation Sub

Toxicology Sub

Odontology Sub

Questioned Documents
Sub

SAC = Scientific Area Committee
Sub = Subcommittee

Understanding the OSAC Levels

Forensic Science Standards Board (FSSB)

- Set policy, rules, priorities for OSAC
- Manage OSAC Registry of Approved Standards and Approved Guidelines

Legal Resource, Quality Infrastructure, Human Factors Committees

- Provide advice across all forensic science and discipline committees

Scientific Area Committees

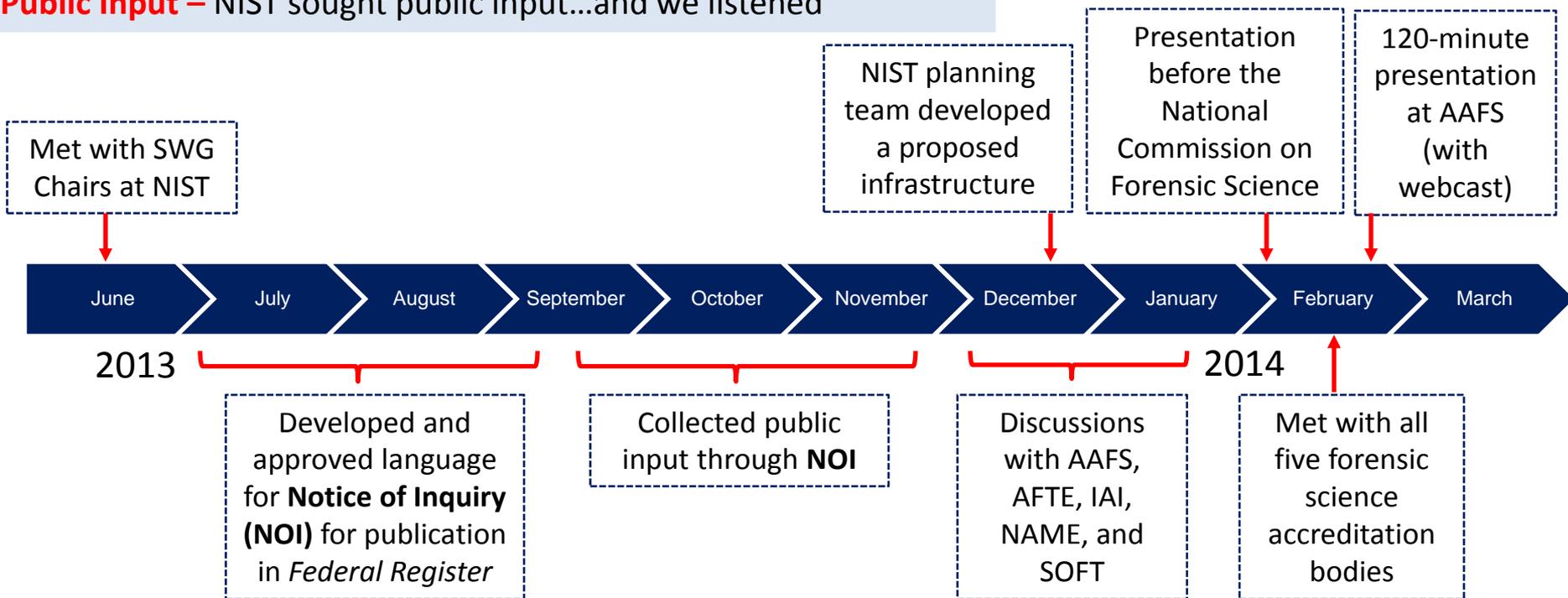
- Manage work within a scientific area (harmonize/leverage across related disciplines)
- Adopt and approve scientific area standards, (e.g., terminology, reporting requirements, conclusion statements)

Discipline Specific Subcommittees (Working Groups)

- Identify and develop (with an SDO or the canvass method) standards & guidelines for discipline

Organization of Scientific Area Committees (OSAC) Input Timeline

Public Input – NIST sought public input...and we listened



Key Values

- Scientifically valid (researchers and statisticians)
- Linked to standards developers & accreditation bodies
- Practitioner generated (forensic scientists)
- Courtroom connected (legal input)

	Scientific Working Group (SWG)	Topic (Forensic Discipline)	Start	Sponsor	Website
1	SWG DAM	DNA	1988	FBI	swgdam.org
2	SWG MAT	Materials (Trace)	1992	FBI	swgmat.org
3	SWG FAST	Friction Ridge (Fingerprints)	1995	FBI	swgfast.org
4	SWG DRUG	Controlled Substances	1997	DEA	swgdrug.org
5	SWG IT	Imaging Technologies	1997	FBI OTD	swgit.org
6	SWG DOC	Document Examination	1997	FBI	swgdoc.org
7	SWG DE	Digital Evidence	1998	FBI OTD	swgde.org
8	SWG GUN	Firearms & Toolmarks			
9	SWG FEX	Fire Debris & Explosives			
10	SWG STAIN	Bloodstain Pattern Analysis			
11	SWG TREAD	Shoeprint & Tire Tread			
12	SWG DOG	Dog & Orthogonal Detector	2004	FBI	swgaog.iu.edu
13	SWG GSR	Gun Shot Residue	2007		
14	SWG ANTH	Anthropology	2008		
15	SWG TOX	Toxicology	2009		
16	FISWG	Facial Identification	2009		
17	SWG DVI	Disaster Victim Identification	2010		
18	SWG MDI	Medicolegal Death Investigation	2010		
19	SWG GEO	Geological Materials	2011		
20	SWG WILD	Wildlife Forensics	2011	USFWS	wildlifeforensicscience.org/ swgwild
21	SWG SPEAKER	Voice Analysis	2012	FBI	swg-speaker.org

NIJ funding of SWGs has stopped; **SWG DAM** and **SWG DE** will continue with FBI funding

Collectively these 21 SWGs have had >750 participants and have produced >250 documents

Department of Justice

Policy focused

Limited Term (FACA)

Attorney General

Recommendations



National Commission
on Forensic Science
(**NCFS**)

NIST

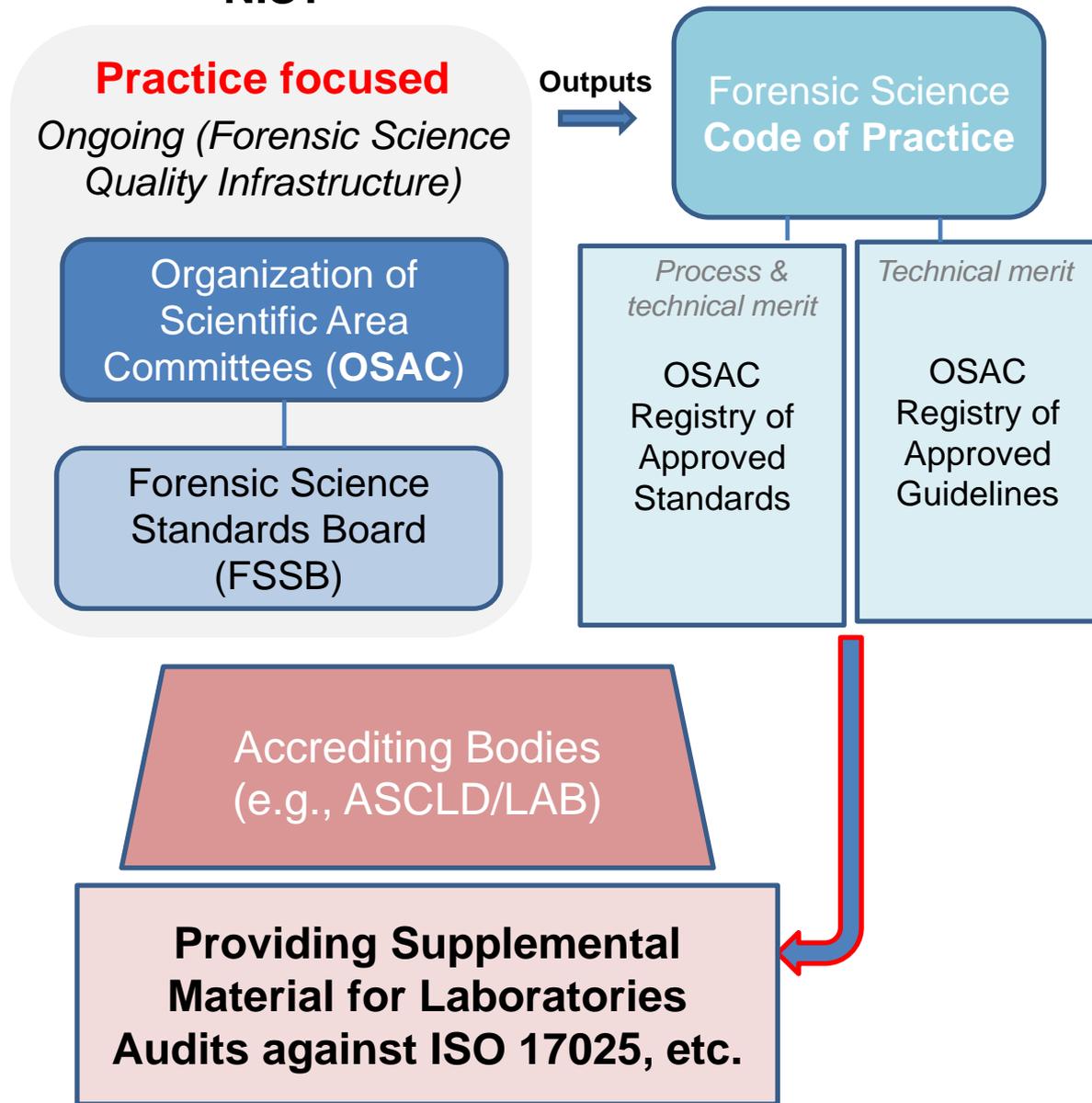
Practice focused

*Ongoing (Forensic Science
Quality Infrastructure)*

Organization of
Scientific Area
Committees (**OSAC**)

Forensic Science
Standards Board
(**FSSB**)

NIST



Save the Date for Future Meetings

- **Forensics@NIST** (Gaithersburg, MD):

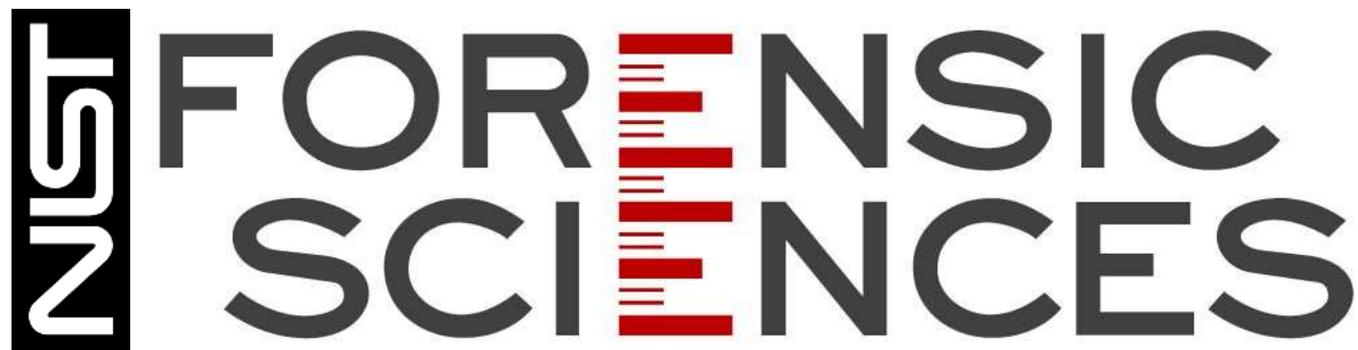
December 3-4, 2014

will be webcast; program will showcase NIST research in DNA, digital evidence, ballistics, and statistics

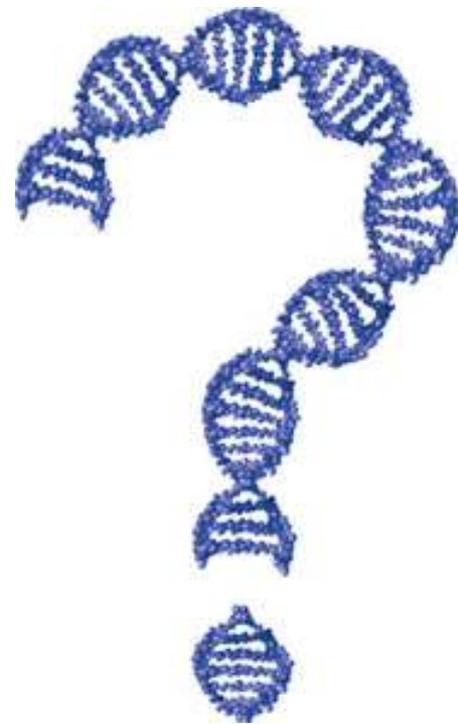
- **International Symposium** on Forensic Measurement Issues and Error (Washington, DC):
July 20-24, 2015 *is being planned*

National Commission on Forensic Science (NCFS):
www.justice.gov/ncfs

Organization of Scientific Area Committees (OSAC):
www.nist.gov/forensics/osac/index.cfm



www.nist.gov/forensics



301-975-4049

john.butler@nist.gov